JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION (JOFOC)

This document is a justification for other than full and open competition prepared by the NASA Langley Research Center (LaRC).

1. The nature and/or description of the action being approved:

This justification provides the rationale for using other than full and open competition to award a five-year contract to the University of Texas (UT), Center for Space Research, for continued provision of highly specialized support to the Gravity Recovery and Climate Experiment (GRACE) mission. The GRACE mission provides highly accurate Earth gravity fields on a temporal and spatial scale suitable for Earth system science research.

2. Description of the supplies or services required, including an estimated value:

In 1997 the Office of Mission to Planet Earth (currently known as the Earth Science Division) at NASA Headquarters, selected the University of Texas, Center for Space Research, with its Principal Investigator (PI), Dr. Byron Tapley, to design, develop and operate the GRACE mission. The competitive selection was made pursuant to a NASA Headquarters Announcement of Opportunity AO-96-MTPE-01. UT was awarded a contract through the NASA Goddard Space Flight Center (GSFC) for the GRACE mission.

The Government management of the GRACE mission moved from GSFC to the Earth System Science Pathfinder (ESSP) Program Office at Langley Research Center (LaRC) in 2008. While the GSFC contract does not expire until September 30, 2013 (or September 30, 2016 if the three remaining options were to be exercised), NASA determined that the UT support for GRACE should be obtained through LaRC, where the ESSP Program Office currently resides. Contracting Officers at both LaRC and GSFC explored the feasibility of transferring the GSFC contract to LaRC for administration. However, because of difficulties associated with this transfer, it was decided that GSFC would not exercise the remaining options and LaRC would put in place a follow-on contract. Therefore, NASA LaRC proposes to award a sole source contract to UT for the continued support to the GRACE mission, including PI-led oversight activities, Science Team support, participation in mission planning and operations, science operations and management, science algorithm and software development and maintenance, validation and data product generation, distribution and archival, science community user support, and publication of results in scientific journals and technical meetings. UT will also oversee the Jet Propulsion Laboratory (JPL) GRACE instrument operation activities. JPL is responsible for performing instrument operations planning, performance monitoring and instrument calibration. In addition, UT will coordinate with the

Deutsches Zentrum fuer Luft-und Raumfahrt (DLR) team members for GRACE spacecraft operations and GRACE data product generation.

NASA intends to issue a five-year contract with a two-year base effort, and a five-year Indefinite Delivery, Indefinite Quantity (IDIQ) line item to accommodate approved mission extensions beyond the base effort. The Government estimate for the contract is $ over the five-year period of performance.

3. Statutory authority permitting other than full and open competition:

Provisions for this JOFOC are made under the statutory authority of 10 U.S.C. 2304 (c)(1) as implemented by FAR 6.302-1, "Only One Responsible Source and No Other Supplies or Services will Satisfy Agency Requirements." Pursuant to FAR 6.302-1(a)(2)(ii), this service is available only from UT, which is the original research and development source of the highly specialized GRACE mission. The GRACE mission has cost in excess of $34M to design, develop, and operate and has only been supported and sustained by UT and team. Award of this contract effort to any other source would result in substantial duplication of cost to the Government that could not be recovered through competition.

4. A demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires use of the authority cited:

The GRACE mission launched in 2002 and had a three year funded mission. In 2005, based on its success, NASA worked with UT to extend the GRACE mission for two years. The extended mission continued to generate excellent scientific results. Based on these results, NASA Earth Science Senior Review Panels approved additional extension proposals for the GRACE mission in 2007, 2009, and 2011. To accommodate the extensions, the GSFC contract with UT was modified to provide continued support. In March 2013, the GRACE mission submitted another proposal to the NASA Earth Science Senior Review Panel to extend the mission. If this Panel approves this and future requests for mission extensions, a NASA LaRC contract with UT will be necessary to oversee the required mission activities.

UT, with its Principal Investigator, Dr. Tapley, is a world leader in the field of satellite geodesy. With over 11 years of experience with the GRACE mission, UT possesses unique capabilities in scientific oversight for the development of the GRACE science data, the processing of algorithms software, dedicated equipment and facilities, and services and personnel to make modifications to the ground system which provides the up/down link between the satellites and the ground system. In addition, UT has unique insight and knowledge of the two-way data communications with DLR's German Space Operations Center, which is the central node of the ground system for all mission operations and data handling functions.

Because of its long history in executing the mission from the time of proposal selection through 11 years of operations, UT is the only source with the

comprehensive, intimate knowledge of GRACE that is critical for continued successful on-orbit performance. UT's unique technical expertise with GRACE is required to effectively and efficiently perform critical PI-led functions necessary for an extended GRACE mission. In addition, no other contractor could perform the required support for this complex and unique mission without a substantial duplication of cost that cannot be recovered through competition. This is because any other source would be required to develop expertise in the operations of the instrument, inclusive of two spacecraft (GRACE 1 and GRACE 2), generation and correlation of scientific data unique to GRACE, and an understanding of the technical challenges previously encountered and resolved in developing and maintaining the mission over an extended period of time. This unique knowledge of the technology, including the software, ground systems, and science data, and previously resolved technical issues and upgrades, make UT the only source capable of providing the required services within the timeframe required and without substantial duplication of cost.

5. Description of the efforts made to ensure that offers are solicited from as many potential sources as practicable:

Following approval of this JOFOC, a synopsis of our requirements will be published on the NASA Acquisition Internet Service (NAIS) and also publicized as required by FAR 5.201(b) on the Federal Business Opportunities (FedBizOpps) announcing NASA LaRC's intention to negotiate with UT on a sole source basis.

6. Description of the market survey conducted, and the results, or a statement of the reasons a market survey was not conducted:

GRACE is a unique mission that originated from UT's original concept and that has been developed and operated successfully for over 11 years as a UT, PI-led mission. In addition, the worldwide scientific community recognizes the University of Texas at Austin as the leader of the successful GRACE mission including strong science leadership, long-term operations management and data product generation, distribution and archival. Therefore, market research to locate another qualified vendor would not be productive. The contract to extend the GRACE mission support will rely extensively upon the knowledge and expertise UT has gained over many years and could not reasonably be performed by another source.

7. Other facts supporting the use of other than full and open competition:

None.

8. Sources, if any, that expressed an interest in writing in the acquisition:

If a source expresses an interest in response to the synopsis (see item 6), NASA will review the capabilities of each source and will document its findings.

9. The actions the agency may take to remove or overcome any barriers to competition before any subsequent acquisition for the supplies or services required:

This contract will provide services required for continued implementation of the GRACE mission. If the mission continues beyond the period of performance on this contract, NASA will determine whether continued service by UT meets all applicable FAR and NFS requirements.

Technical Officer Certification:

I certify that the supporting data presented in this justification are accurate and complete.

_____ _____
Richard C. Law, Lead Program Analyst (Date)

Contracting Officer Certification:

I will ensure that the cost to the Government is determined fair and reasonable prior to award and certify that this justification is accurate and complete to the best of my knowledge and belief.

_____ _____
Timothy P. Cannella, Contracting Officer (Date)

Concurrence:

_____ _____
Rosemary C. Froehlich, Head, Science and (Date)
Flight Projects Contracting Branch

_____ _____
Office of Chief Counsel (Date)

_____ _____
Virginia C. Wycoff, Director (Date)
Office of Procurement

Approval:

_____ _____
Stephen G.Jurczyk, LaRC Competition (Date)
Advocate